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# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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DOG M  
MINERALS PROGRAM  
FILE COPY

June 25, 1990

TO: Minerals File

FROM: Holland Shepherd, Reclamation Specialist *HWS*  
Tony Gallegos, Reclamation Engineer *adg*

RE: North Lily Mine Inspection, M/023/007, Juab County, Utah

An inspection of the North Lily site was made on June 21, 1990. Attending the inspection were Wayne Hedberg, Tony Gallegos, Steel McIntyre, DOGM Board member, and Grant Pinkerton, North Lily Mining Company's General Manager.

Several areas were inspected involving the North Lily operation: the main leach and process area; the old ore tailings pile just north of the main facility, the clay borrow area east of the main facility, and the Mammoth tailings area.

The operator is currently working the old Mammoth tailings pile. The tailings are being removed from Mammoth, some 3 miles from the North Lily site, and trucked to the leaching facility.

The operator has completed mining the old Jesse Knight Smelter tailings across from the leach site. The operator has regraded the disturbance and straw mulched it. Seeding will not take place until late this fall. The clay borrow area has also been regraded and straw mulched.

An important part of this inspection was the site inspection of the Mammoth tailings site. Mr. Pinkerton is concerned that it is reclaimed properly and has asked for advice from the Division in this regard. Mr. Pinkerton also explained that the operator wants to start reclamation as the pile is being worked down.

The operator is removing old ore or waste material back down to original ground level. The original soil material should be adequate for growing vegetation. We have asked the operator to perform some soil samples on this material to help in developing amendments and a seed mixture for the site.

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The ore pile will be removed to original contour on the northwest slope. The final grade will be near 1 to 1 so it will be difficult to reclaim. We discussed terracing this slope with the operator, with 1 - 2 foot benches, at 3 foot to 4 foot intervals.

We plan to provide the operator with a seed mixture for the Mammoth Dump reclamation and the Jesse Knight Tailings reclamation.

The operator pumps well water from the old Mammoth well located 580 feet below ground. The static water level below the mine is 300 feet.

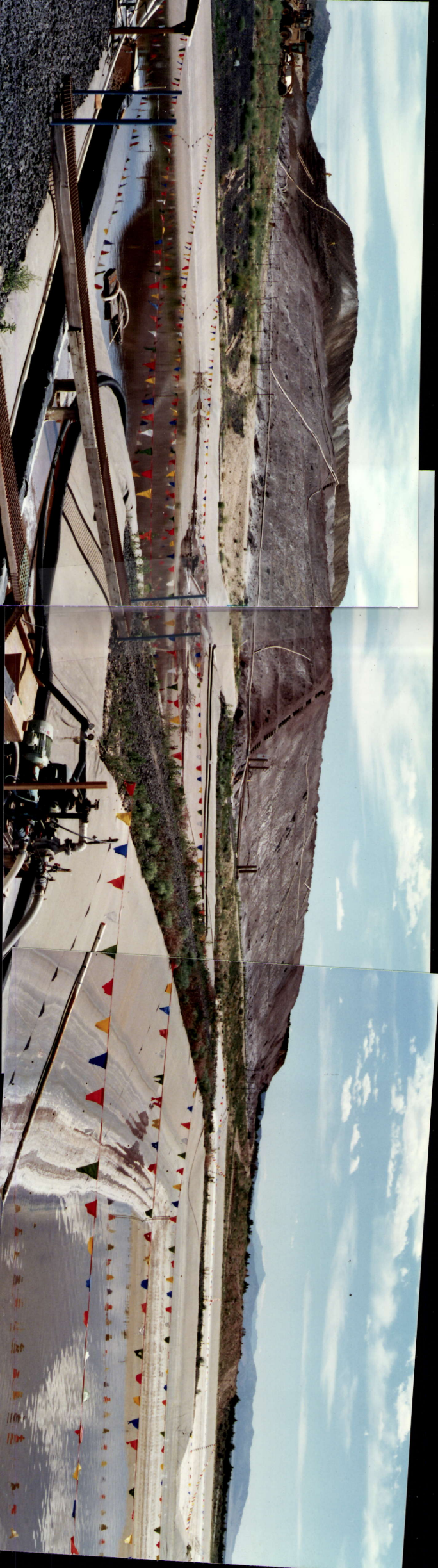
No monitoring wells have been established around the North Lily site to evaluate groundwater impacts. Mr. Pinkerton explained that the leak detection systems and several hundred feet of clay material below the ponds and leach area, made it unnecessary to install monitoring wells.

The operator's ponds have been fenced to prevent wildlife intrusion. The ponds have also been flagged with colored car-lot type flags as a means of discouraging waterfowl intrusion. The leaching solution contains .042% NaCN, or 250 ppm CN on the average. A storage tank for liquid cyanide is being installed and may be in use next month. The tank will store approximately 10,000 gallons of cyanide.

Soil samples were collected at the northeast corner of the site. The sample locations were selected to evaluate soils possibly contaminated with cyanide blown off the heaps by the prevailing wind pattern from the southwest. Two samples were collected: #1, 100 yards northeast of the leach pad by a large pinon tree; #2, across the road 200 yards from the leach pad, also a northeast orientation from the pad.

jb  
cc: Wayne Hedberg  
MNM2307/1-2





W/023/007

North Lily Mine

6-21-90

Leaching facilities

View S

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m/023/007

North Lily Stone

6-21-90

Mammoth Dump Salvage

View W

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M/023/007

North Lily

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Mammoth Dump Area

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